40

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/981,301	10/17/2001	Wayne C. Roach	052050-0008	4998

28977 7590 02/24/2005

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EXAMINER	
CLARK, ISAAC R	

ART UNIT	PAPER NUMBER
2154	

DATE MAILED: 02/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/981,301	ROACH ET AL.	
	Examiner	Art Unit	
	Isaac R Clark	2154	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-42 is/are pending in the application.

4a) Of the above claim(s) 1-14 is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 15-42 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on 18 April 2002 is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-42 are presented for examination.

2. Restriction to one of the following inventions is required under 35 U.S.C. 121:

   I. Claims 1-14, drawn to computer data protocol handshaking, classified in class 709, subclass 237.

   II. Claims 15-42, drawn to encoding and transforming packet data, classified in class 709, subclass 246.

3. Inventions I and II are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. In the instant case, invention II has separate utility such as converting data packets to a different transport level protocol. See MPEP § 806.05(d).

4. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

5. During a telephone conversation with Daniel Golub (Registration #33701) on 02/04/2005 a provisional election was made without traverse to prosecute the invention of II, claims 15-42. Affirmation of this election must be made by applicant in replying to this Office action. Claims 1-14 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Priority

6. The effective filing date for the subject matter in the pending claims in this application is 10/17/2001.

Drawings

7. The drawings filed 04/18/2002 are objected to under 35 U.S.C. 132 because they introduce new matter into the disclosure. 35 U.S.C. 132 states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: Fig. 5 illustrates data in the UDP data portion being pushed down form the IP layer. The drawings submitted with the original application describe this data as being pushed down from the application layer. Further the specification describes data being pushed down from higher layers to the transport layer rather than pushed up from the IP layer.

Applicant is required to cancel the new matter in the reply to this Office Action.

Double Patenting

8. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington,* 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

9. Claims 15, 21, 22, 24, 29, 31, 32, 39, 41, and 42 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 7, 10, 17-19, and 23 of copending Application No. 09/981666. Although the conflicting claims are not identical, they are not patentably distinct from each other because they differ only in that the claims in the instant application do not describe transmitting the UDPVA packets to a data distribution center although the packets are formatted for distributed to a network. However, it would have been obvious to one of ordinary skill in this art at the time the invention was made to transmit the network ready packet to a desired destination. One of ordinary skill in the art would have been motivated to distribute content to a data distribution center to make it available for download to end users thus providing a central repository from which content can be selected.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 112

10. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

11. Claims 15-42 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

12. Claims 15, 17, 20-24, 28-39, 41-42 contain the term user datagram protocol "value-added" (UDPVA). The term "value added" in claims 15, 17, 18, 20-24, 28-39, 41-

42 is a relative term which renders the claim indefinite. The term "value added" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. Because the term "value added" is undefined, the limitation "UDPVA packet" or "user datagram protocol with value-added packet" is indefinite.

13. For the purpose of examining claims containing the limitation UDPVA packets, any extension to a UDP packet is considered to read on this limitation.

14. As per claim 16, claim 16 recites the limitation "the BIntU transceiver" in line 4 of page 80. There is insufficient antecedent basis for this limitation in the claim.

15. As per claim 19, claim 19 recites the limitation "the multimedia architecture" in line 15 of page 80. There is insufficient antecedent basis for this limitation in the claim.

16. Claims 21, 23, 30, and 35 contain the trademark/trade name "Java". Where a trademark or trade name is used in a claim as a limitation to identify or describe a particular material or product, the claim does not comply with the requirements of 35 U.S.C. 112, second paragraph. See *Ex parte Simpson*, 218 USPQ 1020 (Bd. App. 1982). The claim scope is uncertain since the trademark or trade name cannot be used properly to identify any particular material or product. A trademark or trade name is used to identify a source of goods, and not the goods themselves. Thus, a trademark or trade name does not identify or describe the goods associated with the trademark or trade name. In the present case, the trademark/trade name is used to identify/describe applets and, accordingly, the identification/description is indefinite.

17. It is recommended that "Java applets" be referred to as "applets" in the claims.

18. As per claim 28, claim 28 describes transmitting a return packet in response to a "record UDPVA" packet. The scope of this limitation is unclear because the specification does not define a record packet, and the term is not an ordinary term of art.

19. The remaining claims are rejected based on their dependencies.

Claim Rejections - 35 USC § 103

20. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

21. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

22. Claims 15-17, 19, 20, 22, 24, 28, 34, 36-38, and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cleary et al. (US Published Application

2002/0174438, hereinafter Cleary) in view of Berg et al. (US Patent 6,674,713 B1, hereinafter Berg).

23. As per claim 15, Cleary teaches a data distribution center for transferring user datagram protocol packets to an end user comprising: an encoder/decoder (codec) configured to alternatively encode or decode UDP frame information (Paragraph 0098 encoder converts mpeg data to UPD; Paragraph 0086 decoder converts packets to display compatible format); and wherein the UDP packet is available for delivery to a network destination address or storage located on a local area network or a wide area network (Paragraph 0025; packets provided to requesting user via high speed channel).

24. Cleary does not explicitly teach that a DSP portion for converting UDP packets to UPDVA packets, wherein the DSP portion conveys the UDPVA packet including UDP frame information, and wherein the UDPVA packet is available for delivery to the end user rather than a UDP packet.

25. Berg teaches processing UDP packets into a value added protocol (RUDP), which encapsulates the UDP frame data for delivery to an end user (col. 8, lines 8-17; col. 17, lines 60-67).

26. It would have been obvious to one of ordinary skill in this art at the time the invention was made to combine the teaching of Cleary and Berg because they both deal with transmission of datagrams over a broadband network. Furthermore, the teaching of Berg to use UDP packets with value added would increase the reliability of transmission over UDP (which provides no end to end reliability) without introducing the

high overhead of TCP which would result in decreased transmission speed for multimedia data (See Berg, col. 17, lines 9-55).

27. As per claim 16, Cleary teaches the data distribution center of claim 15, further comprising an on-screen display buffer that dynamically assigns display specifications based on application requirements, wherein the application requirements relate to an application selected by an end user using a BIntU transceiver (Paragraph 0104; on screen display used by end user to select programming and time-delay parameters).

28. As per claim 17, Cleary does not explicitly teach the data distribution center of claim 15, wherein the value-added information included in the UDPVA packet includes an indicator of UDP delivery of header information.

29. Berg teaches using value added information in a UDPVA packet the value-added as an indicator of UDP delivery of header information (col. 18, lines 49-52).

30. It would have been obvious to one of ordinary skill in this art at the time the invention was made to combine the teaching of Cleary and Berg because they both deal with transmission of datagrams over a broadband network. Furthermore, the teaching of Berg to use UDP packets with value added as an indicator of UDP delivery of header information would increase the reliability of transmission over UDP (which provides no end to end reliability) without introducing the high overhead of TCP which would result in decreased transmission speed for multimedia data (See Berg, col. 17, lines 9-55).

31. As per claim 19, Cleary teaches the data distribution center of claim 15, wherein the multimedia architecture includes a controller/processor 175 (Fig. 1; Paragraph 0050).

32. As per claim 20, Cleary teaches the data distribution center of claim 15, wherein the UDPVA packet includes at least one from audio, video, and other data (Paragraph 0016. video data or other information on demand).

33. As per claim 22, Cleary teaches the data distribution center of claim 15, wherein the data distribution center interfaces with a broadband interface unit (BIntU) transceiver (item 180, Fig, 1).

34. Cleary does not explicitly teach that the BIntU transceiver transmits a return packet to the data distribution center in response to the UDPVA packet.

35. Berg teaches transmitting a return packet in response to the UDPVA packet (col. 18, lines 50-52; col. 21, lines 37-45)

36. It would have been obvious to one of ordinary skill in this art at the time the invention was made to combine the teaching of Cleary and Berg because they both deal with transmission of datagrams over a broadband network. Furthermore, the teaching of Berg to have the transceiver transmit a return packet to the data distribution center in response to the UDPVA would increase the reliability of transmission over UDP (which provides no end to end reliability) without introducing the high overhead of TCP which would result in decreased transmission speed for multimedia data (See Berg, col. 17, lines 9-55).

37. As per claim 24, Cleary teaches the data distribution center of claim 15, wherein the UDPVA packet is transmitted to a remote BIntU transceiver utilizing security techniques to ensure the identity of an end user (Paragraph 0025; content is encrypted an decrypted by end user).

38. As per claim 28, Cleary teaches the data distribution center of claim 24, wherein the data distribution center interfaces with a broadband interface unit transceiver (Fig. 1, item 180). Cleary further teaches an end user at the BIntU transceiver accessing the UDPVA packet based on the security techniques (Paragraph 0025; content is encrypted an decrypted by end user).

39. Cleary teaches transmission of packets of packets to the data distribution center (Paragraph 0072), but does not explicitly teach that the data distribution center selectively transmits a return packet to the BIntU transceiver in response to a record UDPVA packet.

40. Berg teaches transmitting return packets using value added information in a UDPVA packet the value-added as an indicator of UDP delivery of header information in response to received packets (col. 18, lines 49-52).

41. It would have been obvious to one of ordinary skill in this art at the time the invention was made to combine the teaching of Cleary and Berg because they both deal with transmission of datagrams over a broadband network. Furthermore, the teaching of Berg to send a return packet in response to the transmitted UDPVA packet would increase the reliability of transmission over UDP (which provides no end to end reliability) without introducing the high overhead of TCP which would result in decreased transmission speed for multimedia data (See Berg, col. 17, lines 9-55).

42. As per claim 34, claim 34 is a method claim describing the process carried out by the data distribution center of claim 15. Claim 34 is rejected for the same reasons as claim 15.

43. As per claim 36, Cleary teaches the method of claim 34, wherein the data distribution center transmits the UDPVA packet to a broadband interface unit (BIntU) transceiver (Fig. 1, item 180; Paragraph 0025).

44. As per claims 37 and 38, claims 37 and 38 is rejected for the same reasons as claims 22 and 24 respectively.

45. As per claim 42, claim 42 described the data distribution center described in claim 15, with the added limitation that the UDPVA packet is transmitted at, or below, the transport level. The UDPVA protocol (RUDP) described in Berg is a transport level protocol (col. 17, lines 9-11). Claim 42 is rejected for the same reason as claim 15.

46. Claims 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cleary and of Berg as applied to claim 15 above, and further in view of Gutmann et al. (US Patent 5,774,674, hereinafter Gutmann).

47. As per claim 18, Cleary teaches the data distribution center of claim 15, including transmission of packets to and end user, and further comprising a processor (Fig. 1, 150; processor in video server; Paragraphs 0019; receipt of content by end user).

48. Cleary does not explicitly wherein the UDPVA packet is received from an end user located at a BIntU transceiver independently of the processor.

49. Gutmann teaches transmitting datagrams between end user stations with the parameters for the underlying data being negotiated between the stations rather than through a centralized distribution center (col. 1, line 63 – col. 2, line 11).

50. It would have been obvious to one of ordinary skill in this art at the time the invention was made to combine the teaching of Cleary and Gutmann cause they both

deal with transmission of multimedia data as datagrams in a broadband network. Furthermore, the teaching of Gutmann to pass data to an end user independently of a processor in the data distribution center would allow peer-to-peer communications without increased efficiency by avoiding the overhead of processing data in a node that is not part of the network path between the peer end user stations (See Gutmann col. 1, lines 47-52).

51. Claims 21, 23 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cleary and of Berg as applied to claim 15 above, and further in view of Novak (US Published Application 2002/0104099).

52. As per claim 21, Cleary does not explicitly teach the data distribution center of claim 15, wherein the UDPVA packet includes a Java applet.

53. Novak teaches distributing a datagram packet including a Java applet (Paragraph 0081).

54. It would have been obvious to one of ordinary skill in this art at the time the invention was made to combine the teaching of Cleary and Novak because they both deal with distribution of multimedia content over a broadband network using datagrams. Furthermore, the teaching of Novak to transmit a packet containing a Java applet would allow providing interactive capabilities at the transceiver thus providing a more efficient user interface for the user to navigate and select content (See Novak, Paragraph 0080).

55. As per claims 23, Cleary does not explicitly teach the data distribution center of claim 22, wherein the UDPVA packet includes a Java applet, and wherein the return packet is transmitted in response to the Java applet.

56. Novak teaches distributing a datagram packet including a Java applet (Paragraph 0081). The rationale for combining Novak and Cleary is as described for claim 21 above.

57. Berg teaches transmitting a return packet in response to the UDPVA packet (col. 18, lines 50-52; col. 21, lines 37-45)

58. It would have been obvious to one of ordinary skill in this art at the time the invention was made to combine the teaching of Cleary and Berg because they both deal with transmission of datagrams over a broadband network. Furthermore, the teaching of Berg to have the transceiver transmit a return packet to the data distribution center in response to the UDPVA would increase the reliability of transmission over UDP (which provides no end to end reliability) without introducing the high overhead of TCP which would result in decreased transmission speed for multimedia data (See Berg, col. 17, lines 9-55).

59. Claims 25-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cleary and Berg as applied to claim 24 above, and further in view of 'Official Notice'.

60. As per claims 25-27, Cleary and Berg as applied to claim 24 teach the use of encryption to verify that a packet is delivered to an end user but do not explicitly teach the use of smart cards, biometric technology, or private key encoding. However these techniques were well known in the art at the time the applicants' invention was made. It would have been obvious to one of ordinary skill in this art at the time the invention was made to use these techniques for identifying the recipient because doing so would ensure that content distributed across a public network was received by only by the

intended individual thus protecting the ability to generate revenue from offering the service.

61. As per claim 35, claim 35 is rejected for the same reasons as claim 21.

62. Claims 29-33, 39 and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cleary et al. (US Published Application 2002/0174438, hereinafter Cleary) in view of Berg et al. (US Patent 6,674,713 B1, hereinafter Berg) and further in view of Novak (US Published Application 2002/0104099).

63. As per claims 29-33, these claims describe a method for transmitting UPDVA packets to a data distribution center from a broadband transceiver. The method described is the method carried out by the apparatus described in claims 15-23 for transmitting packets from a distribution center to a transceiver.

64. Novak teaches uploading content to a data distribution center for providing to further end users.

65. It would have been obvious to one of ordinary skill in this art at the time the invention was made to combine the teaching of Novak and Cleary because they both deal with transmission of datagrams over a broadband network. Furthermore, the teaching of Novak to modify the method taught by Cleary to provide a method for transmitting UDPVA datagrams to a data distribution center would allow users to efficiently provide multimedia content to end users (See Novak, Paragraphs 0002-0008).

66. Claims 39 and 41 are rejected for the same reason as claim 29 above.

67. As per claim 40, Cleary teaches the apparatus of claim 39, further comprising: means for encoding UDP frame information to form a second UDP packet, wherein the second UDP packet is transmitted to a second BIntU transceiver (Fig. 1, items 180 showing plurality of transceivers; Paragraphs 0021; packets sent to plurality of recipients).

Conclusion

68. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following patents and publications are cited to further show the state of the art with respect to "Data distribution center and associated method".

i. US Patent 6,157,719 Wasilewski et al.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Isaac R Clark whose telephone number is (571)272-3961. The examiner can normally be reached on Monday-Friday 8:00am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John A Follansbee can be reached on (571)272-3964. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

IRC

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